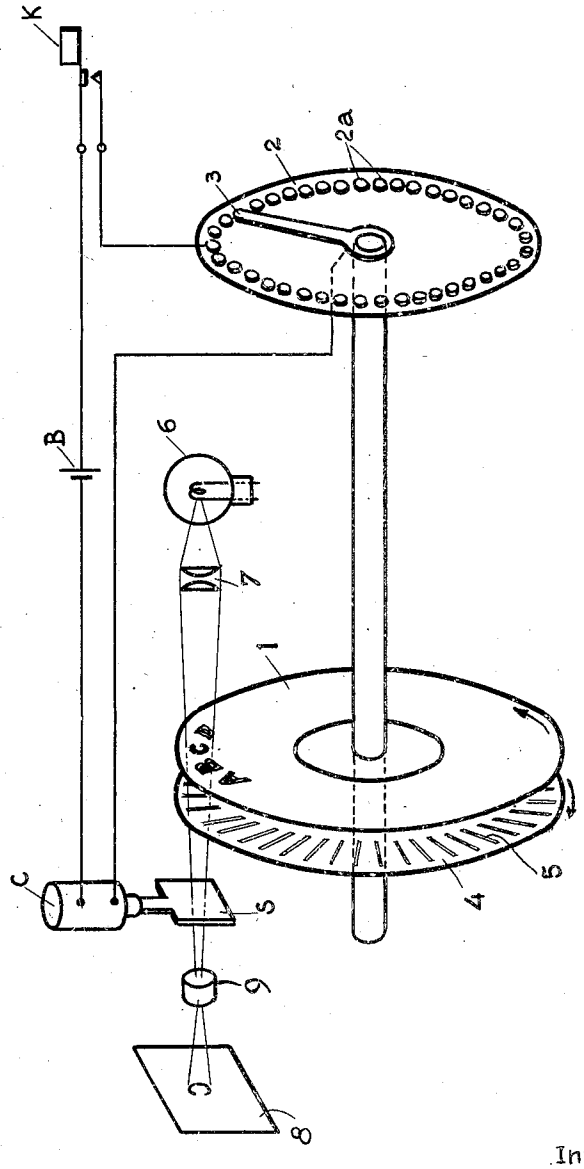
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PHOTOGRAPHIC TYPE COMPOSING MACHINE HAVING STROBOSCOPIC CHARACTER SCANNING SYSTEM

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PHOTOGRAPHIC TYPE COMPOSING MACHINE HAVING STROBOSCOPIC CHARACTER SCANNING SYSTEM

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4 Claims. (Cl. 95—4.5)

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The invention relates to photographic typewriting machines or typewriters.

According to features of the invention, the characters to be photographed to form a line are placed on a continuously rotating disc or drum, in front of which rotates another disc or drum at the same speed but in a reverse direction, the latter disc or drum being provided with narrow slits in the same number as the characters borne by the former disc. In this way a sharp image is obtained in spite of the continuous rotation, the width of said image being however shortened. In order to obtain a character of the desired shape it is sufficient to double the width of the matrix characters. A lens shutter or other appropriate device operates at the instant when the character to be photographed passes in front of the photographic lens.

The accompanying drawing represents a preferred embodiment of the invention.

In the drawing a disc 1 bears the matrix characters to be photographed. On the same shaft is mounted a brush 3, adapted to wipe a series of fixed terminals 2a equal in number to the number of characters on disc 1. On the same axis, but revolving in the opposite direction is the shutter disc 4 bearing as many slits 5 as there are characters on the matrix disc 1. A lamp 6 and an optical device 7 project on the character to be photographed a light beam of high intensity. The matrix disc and the shutter disc are placed as close together as practically possible. A shutter S is provided with the optical system so that no exposure is made in the rest position. When a predetermined letter to be photographed passes in front of the exposure frame 8, the lens shutter S is operated and remains operated until said letter has been swept in its entirety by the slit 5 of the cooperating shutter disc 4. Said lens shutter is actuated at this proper moment by means of the electric brush 3 when it comes into contact with the terminal of disc 2 corresponding to the depressed key K of the keyboard.

When brush 3 comes into contact with the terminal to which an electric potential has been applied from the source B through the selected key K corresponding to the letter to be printed, a circuit is completed to energize a suitable device such as a solenoid C for actuating the shutter S. The duration of this contact is chosen equal to the duration of the passage of the character in front of the exposure frame 8. 9 indicates a lens located in the projection system positioned between the disc 5 and the frame 8.

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The opposite rotation of the matrix and shutter discs may be obtained by means of bevel gears, and the distance between the two discs is made as short as practically possible in order to obtain sharp images.

The lens shutter may be made in a number of different ways. It may be electric or mechanical. For instance it may be composed by two electromagnets actuating each a small shutter plate. When a current is sent through the magnets, the shutter is actuated to give passage to the light.

What is claimed is:

1. In a photographic type composing machine the combination of a carrier provided with characters of double width moving continuously in one direction, a masking member moving in the opposite direction at the same speed as said carrier and provided with an equal number of slits which are narrow with respect to the width of said characters and are arranged transversely of the direction of travel of said characters, whereby said characters are scanned by said slits as they move into photographic position, a source of light arranged on one side of said carrier to illuminate the characters in photographic position, a receiving surface arranged on the other side of said carrier in a position to receive an image of the character in photographic position, a manually operable selector means for selecting a character to be printed, and means controlled by said selector means for projecting upon said receiving surface the image of only one character for each revolution of said carrier.

2. A photographic type composing machine according to claim 1 in which said source of light normally illuminates the characters in photographic position, and including a shutter positioned between said source and said receiving surface normally to interrupt the light rays, and including means controlled by said selector means for moving said shutter out of the path of said rays when the selected character moves into photographic position.

3. A photographic type composing machine according to claim 1 in which said light source is normally de-energized and said last recited means includes means for energizing said light source during the time that the selected character passes through the photographic position.

4. In a photographic type composing machine the combination of a carrier provided with characters of double width moving continuously in one direction, a masking member moving in the opposite direction at the same speed as said carrier and provided with an equal number of slits

which are narrow with respect to the width of said characters and are arranged transversely of the direction of travel of said characters, whereby said characters are scanned by said slits as they move into photographic position, a source of light arranged on one side of said carrier to illuminate the characters in photographic position, a receiving surface arranged on the other side of said carrier in a position to receive an image of the character in photographic position, a keyboard having a key for each character on said carrier, a rotary switch driven in synchronism with said carrier and having a contact for each character, an electric circuit for each character including a normally open switch controlled by a key on said keyboard and including a contact on said rotary switch, whereby the operation of a selected key causes the circuit of a selected character to be energized during the time said character is passing through photographic position, and means controlled by the energization of any of said circuits for projecting upon said receiving surface the image of a selected character passing through photographic position.

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